

UTAH DIVISION OF WATER QUALITY

Storm Water and TMDLs



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Jordan River Basin TMDL Coordinator

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TMDL / Watershed Planning

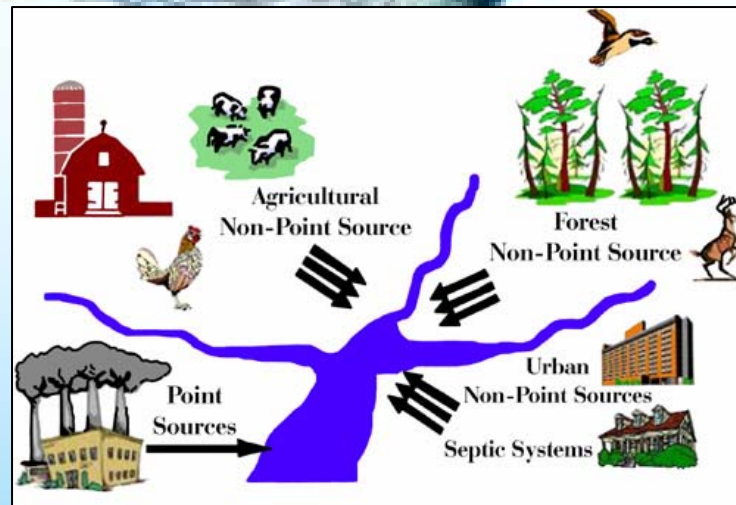
- **Develop Total Maximum Daily Loads (TMDLs)**
- **Develop watershed restoration plans**
- **Facilitate watershed management efforts**
- **Coordinate and track implementation projects**



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$$\text{TMDL} = \text{LA} + \text{WLA} + \text{MOS}$$

The sum of nonpoint sources (NPS), point sources (PS), and a margin of safety, to attain water quality standards of an impaired water body.



- LA - Load Allocations from Non-Point Sources
- WLA - Waste Load Allocations from Point Sources
- MOS - Margin of Safety



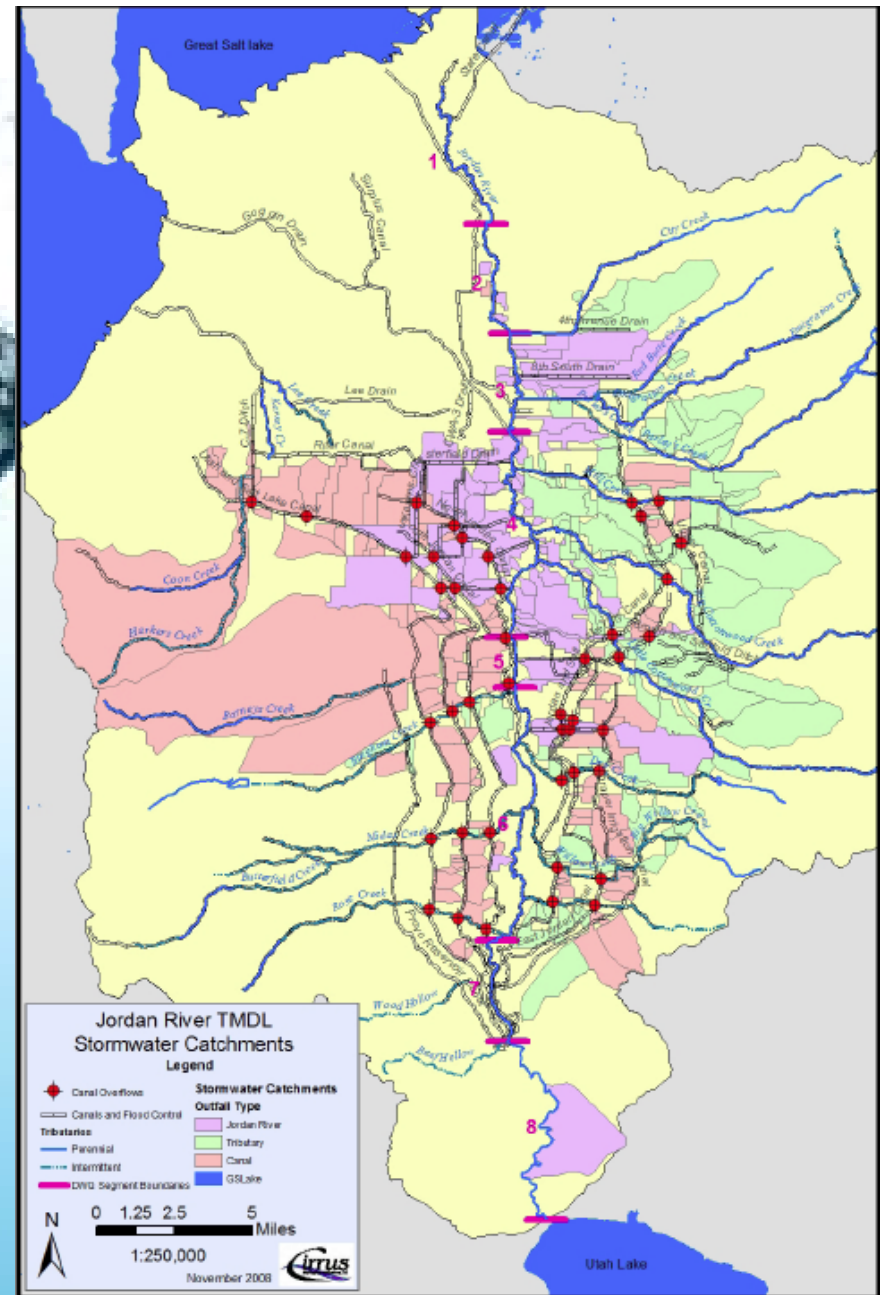
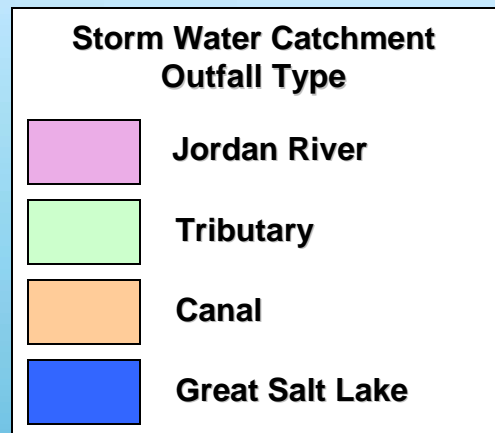
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Amount of storm water discharge produced by a given catchment is a function of:

- Area serviced
- Precipitation amount
- Percent of impervious surface
- Land cover type



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Jordan River Pollutant Sources

Utah Lake

Tributaries

Point-source/Permitted
Discharge

Storm Water

Diffuse runoff

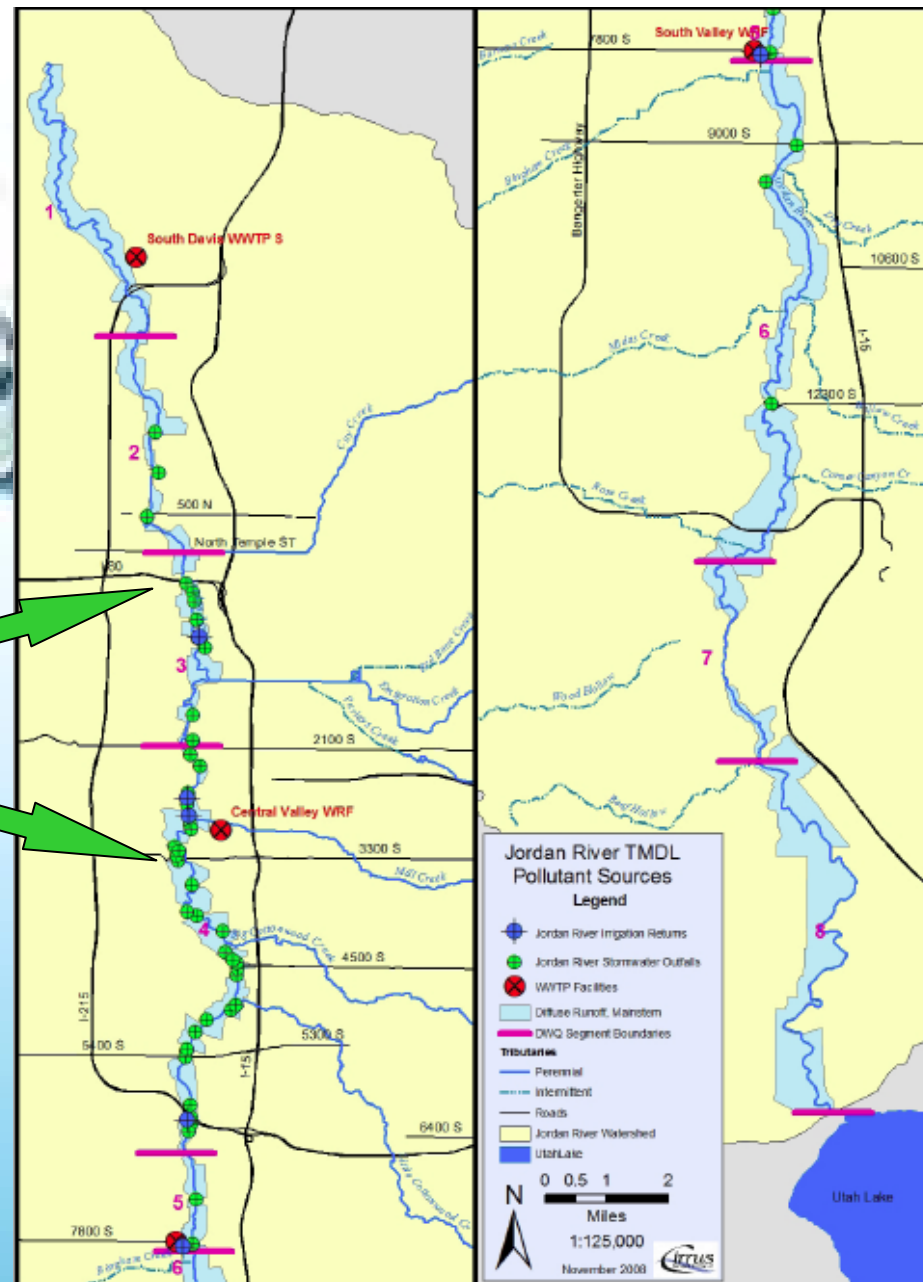
Return flows

Groundwater

Natural Background



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Storm water: Jordan River Inputs by Location

Table 3.6. Annual stormwater pollutant loads (tons/year) for each DWQ Segment from outfalls that discharge directly to the Jordan River.

Segment	TSS	Total P	BOD	TDS	NH ₄
1	0	0.0	0	0	0.0
2	34	0.2	4	47	0.1
3	945	4.2	101	1,313	2.6
4	2,294	10.1	244	3,188	6.3
5	188	0.8	20	262	0.5
6	372	1.6	40	516	1.0
7	0	0.0	0	0	0.0
8	425	1.9	45	591	1.2
Grand Total	4,259	19	454	5,918	12

Table 3.7. Annual stormwater pollutant loads (tons/year) by municipality from outfalls that discharge directly to the Jordan River.

Jurisdiction	TSS	Total P	BOD	TDS	NH ₄
Salt Lake County	583.4	2.6	62.1	810.7	1.6
Lehi	425.5	1.9	45.3	591.3	1.2
Midvale	45.5	0.2	4.8	63.2	0.1
Murray	296.6	1.3	31.6	412.1	0.8
Riverton	15.1	0.1	1.6	21.0	0.0
Salt Lake City	827.7	3.7	88.1	1,150.2	2.3
Sandy	462.5	2.0	49.3	642.7	1.3
South Jordan	24.4	0.1	2.6	33.9	0.1
South Salt Lake	58.3	0.3	6.2	81.0	0.2
UDOT	48.5	0.2	5.2	67.4	0.1
West Jordan	901.4	4.0	96.0	1,252.6	2.5
West Valley City	569.9	2.5	60.7	791.9	1.6
TOTAL	4,259	19	454	5,918	12



http://www.waterquality.utah.gov/TMDL/Jordan_River_JordanTMDLWorkElement2_public_draft_2-2-09.pdf

What does this mean to ME?

- **Current focus on BMP solutions**
- **DWQ will continue to conduct analytical monitoring**
- **Will eventually result in specific allocations/permit limits for storm water outfalls, but we're not there yet**
- **Critical for you to get involved with the TMDL process!**



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For more information

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<http://www.waterquality.utah.gov/TMDL/index.htm>



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